Tank Vessel Market Indicators

July 2005

Office Of Statistical and Economic Analysis
U.S. Maritime Administration
(www.marad.dot.gov/marad_statistics)

Highlights

- For the period 1994 to 2003, domestic product tanker trades (ton-miles) declined by 27 percent to 63.9 billion ton-miles. For the same period, shipments by coastal tank barges, pipelines, and foreign product tankers (imports), increased significantly. (Exhibits 1-4 and 10).

- In 2003, coastal tank barge shipments coastal tank barge trades were 38 billion ton-miles, up 30 percent from 10 years earlier. For the same period, tank barge shipments (metric tons) increased by only 4 percent while average haul (miles, ton-miles/tons) increased by 25 percent (Exhibits 2-3 and 10). The growth of tank barge shipments in traditional interregional product tanker trades contributed to the increase in average haul.

- In 2003, U.S. waterborne tanker imports were 605 million metric tons; 3.4 times larger than domestic tank vessel (tanker and tank barge) shipments and 6.9 times larger than domestic tanker shipments (Exhibits 4 and 10). Over the period 1994 to 2003, waterborne imports increased by 48 percent, while domestic tanker shipments declined by 21 percent.

- The Alaska/U.S. West Coast crude oil trades, the primary source of demand for U.S.-flag crude carriers, declined by 50 percent (66 billion ton-miles) from 1994 to 2003, reflecting a decline in Alaska crude oil production (Exhibits 5 and 10). A major impact of the decline was on the long-haul Alaska/Panama/U.S. Gulf trades and Alaska/U.S. Virgin Islands trades which ended in the late 1990's.

- In 2004, 67 percent of the tanker calls at U.S. ports were by double-hull vessels, up from 37 percent in 1994 (Exhibits 6 and 10). In 2004, about 19 percent of the calls were by U.S.-flag tankers (Exhibits 7 and 10). Fifty percent of the U.S.-flag calls were by double-hull tankers.

- Forty-four new/retrofitted double-hull tank barges were added to the fleet (203 barges) over the last five years (Exhibits 8 and 11). Another 20 new/retrofitted double hull tank barges will be delivered over the next 2 years.

- Only 5 U.S.-flag tankers (crude carriers) were built in the last five years (Exhibits 8 and 11). Another 4 crude carriers will be delivered over the next 2 years. Seventy-one percent (49 out of 69) of U.S.-flag tankers were built prior to 1985.

- International tanker charter rates have been highly volatile in recent years reflecting changes in international petroleum stocks and trades (Exhibit 9).

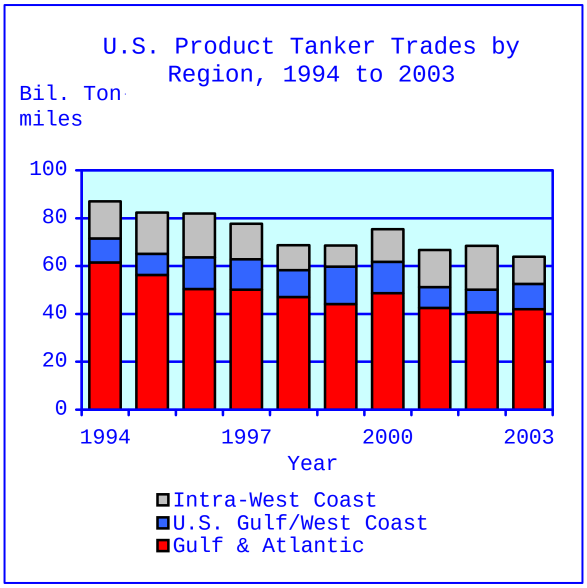

Exhibit 1

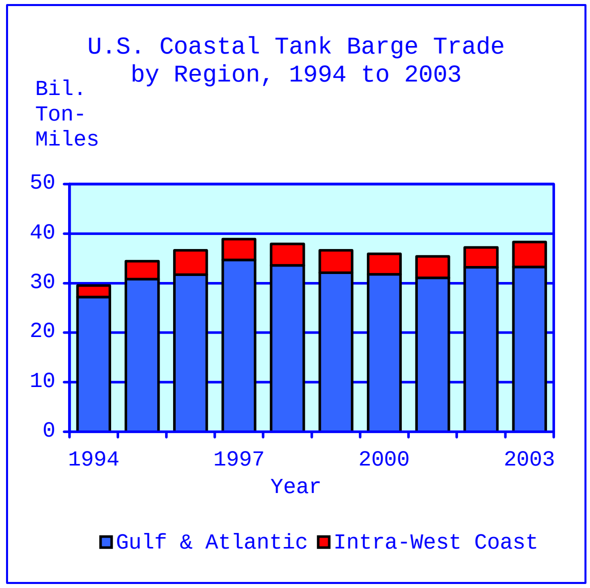

Exhibit 2

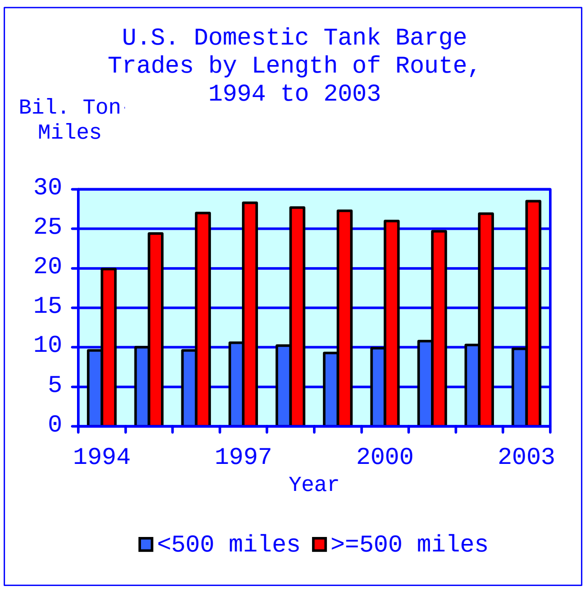

Exhibit 3

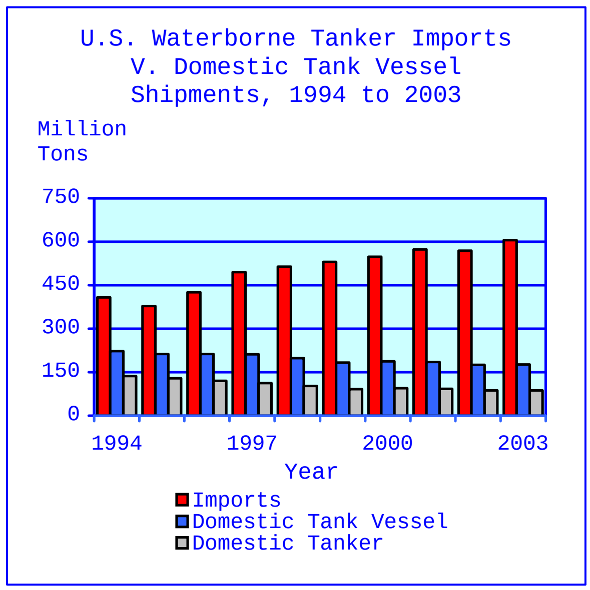

Exhibit 4

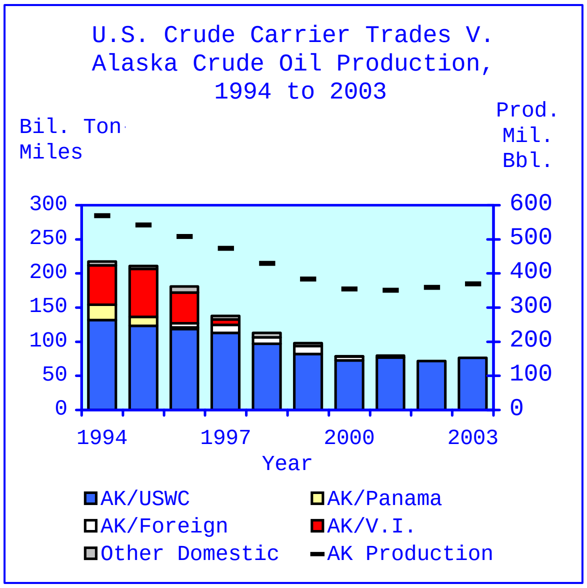

Exhibit 5

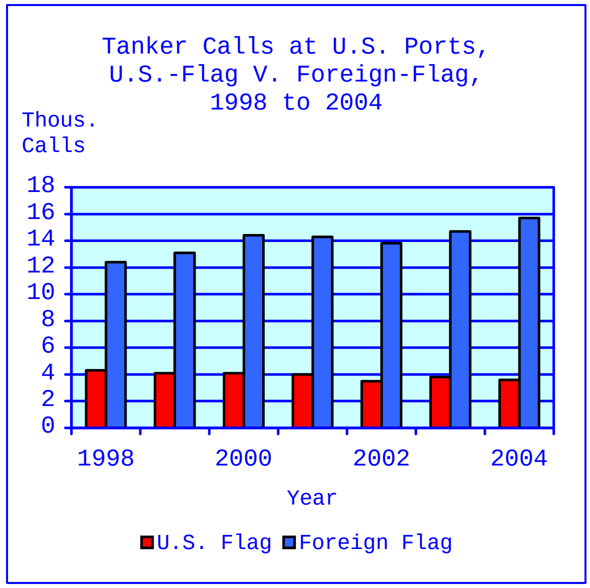

Exhibit 6

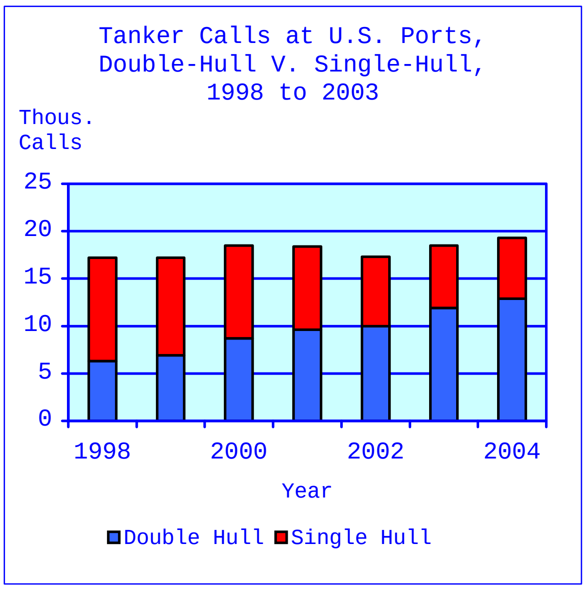

Exhibit 7

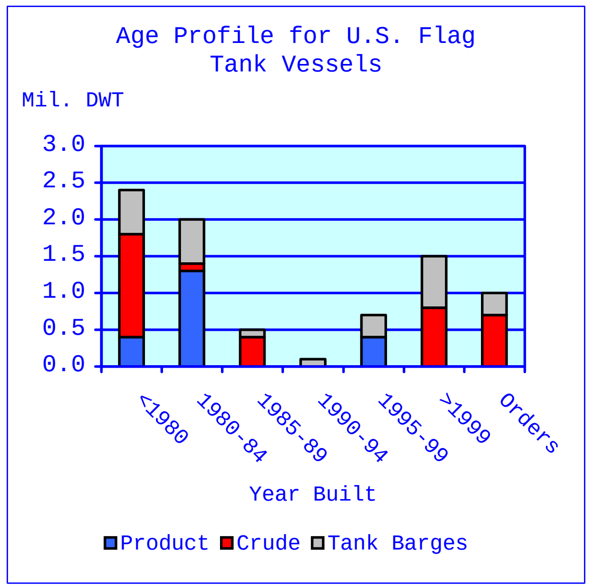

Exhibit 8

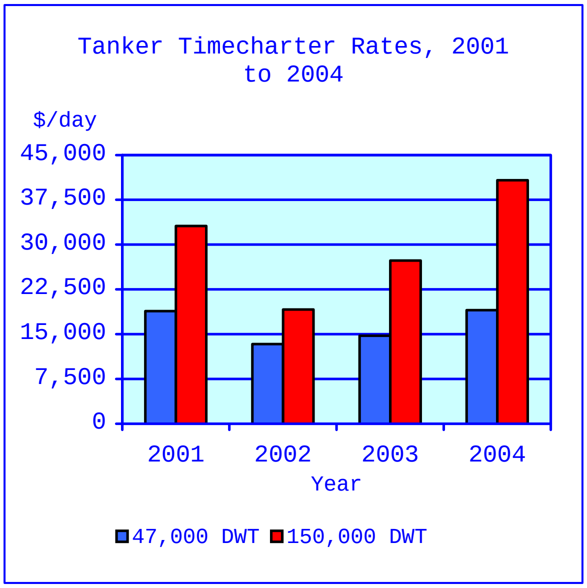
Tanker Timecharter Rates, 2001 to 2004
$/day
45,000
37,500
30,000
22,500
15,000
7,500
0
2001
2002
2003
2004
Year
47,000 DWT
150,000 DWT

Exhibit 9

U.S. Tank Vessel Market Indicators

Vessel Type/Trade	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Domestic Product Tanker (10,000 – 69,999 DWT)											
All Product Tanker Trades											
Million Tons	60.7	58.5	55.2	51.8	50.5	46.8	54.4	50.7	48.0	45.8	
Bil. Ton-miles	87.0	82.4	81.9	77.7	68.7	68.6	75.4	66.7	68.5	63.9	
Gulf and Atlantic											
Million Tons	36.1	32.6	29.3	30.6	34.0	32.3	36.2	33.0	31.0	32.5	
Bil. Ton-miles	61.5	56.3	50.4	50.1	47.0	44.1	48.7	42.5	40.7	42.0	
Gulf/West Coast											
Million Tons	1.6	1.4	2.1	2.0	1.8	2.5	2.1	1.4	1.5	1.7	
Bil. Ton-miles	10.0	8.8	13.3	12.7	11.3	15.7	13.0	8.7	9.5	10.5	
Intra-West Coast											
Million Tons	23.1	24.5	23.8	19.2	14.6	12.0	16.2	16.2	15.4	11.6	
Bil. Ton-miles	15.5	17.2	18.3	14.9	10.4	8.8	13.7	15.6	18.3	11.4	
Domestic Tank Barge, (5,000+ DWT)											
All Tank Barge Trades											
Million Tons	86.1	87.5	92.9	98.9	95.1	91.6	92.1	92.1	88.1	89.9	
Bil. Ton-miles	29.5	34.4	36.6	38.9	37.9	36.6	35.9	35.4	37.2	38.3	
Gulf and Atlantic											
Million Tons	78.8	77.4	80.5	86.9	84.6	79.4	77.8	80.0	78.1	78.5	
Bil. Ton-miles	27.2	30.8	31.7	34.7	33.6	32.1	31.8	31.1	33.2	33.3	
Intra-West Coast											
Million Tons	7.3	10.2	12.5	12.0	10.5	12.2	14.3	12.1	10.1	11.4	
Bil. Ton-miles	2.3	3.6	4.9	4.2	4.3	4.5	4.1	4.3	4.0	5.0	
< 500 miles											
Million Tons	67.8	65.8	67.8	73.0	69.5	66.8	68.8	68.7	63.2	63.9	
Bil. Ton-miles	9.6	10.0	9.6	10.6	10.2	9.3	9.9	10.8	10.3	9.8	
>= 500 miles											
Million Tons	18.3	21.8	25.1	25.9	25.6	24.8	23.3	23.4	25.0	26.0	
Bil. Ton-miles	19.9	24.4	27.0	28.3	27.7	27.3	26.0	24.7	26.9	28.5	
Domestic Crude Carriers, (70,000+ DWT)											
All Crude Carrier Trades											
Million Tons	76.1	67.3	64.4	61.2	52.8	44.6	40.6	41.9	38.5	41.5	
Bil. Ton-miles	160.1	141.0	130.0	118.0	103.2	85.9	73.4	79.5	71.8	76.2	
Alaska/West Coast											
Million Tons	66.1	62.5	60.5	59.1	50.4	42.7	38.1	41.0	38.5	41.5	
Bil. Ton-miles	131.5	123.0	118.8	113.2	97.0	81.8	72.8	76.7	71.8	76.2	
All Domestic Tank Vessels, All Trades											
Million Tons	222.9	213.3	212.5	211.9	198.4	183.0	187.1	184.7	174.7	177.2	
Bil. Ton-miles	276.6	257.8	248.5	234.6	209.8	191.1	184.7	181.6	177.5	178.4	
Imports, Tanker											
U.S. Imports (Tanker)											
Million Tons	408	378	426	495	514	531	548	573	569	605	630
World Seaborne Trade (Petroleum)											
Million Tons	1,816	1,858	1,958	2,057	2,030	2,082	2,148	2,207	2,178	2,310	2,405
Tanker Calls at U.S. ports											
All Flags					16,841	17,279	18,535	18,387	17,320	18,503	19,316
Double-Hull					6,255	6,942	8,742	9,568	10,045	11,903	12,925
Product Tanker					10,208	10,875	11,868	11,780	10,949	10,998	11,572
Double-Hull					3,612	3,996	5,184	5,755	5,770	6,576	6,759
Crude Carrier					6,633	6,404	6,667	6,607	6,371	7,505	7,744
Double-hull					2,643	2,946	3,558	3,813	4,275	5,327	6,166
U.S. Flag					4,345	4,095	4,103	4,009	3,549	3,759	3,591
Double-hull					984	1,114	1,414	1,513	1,448	1,637	1,798
Product Tanker					2,880	2,849	2,932	2,861	2,430	2,369	2,459
Double-hull					862	958	1,228	1,250	1,062	1,168	1,277
Crude Carrier					1,465	1,246	1,171	1,148	1,119	1,390	1,142
Double-hull					122	156	186	263	386	469	521

Exhibit 10

U.S. Tank Vessel Market Indicators – cont.

Other Tank Vessel Market Indicators (Mil. Bbl)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
U.S. Demand	6,467	6,470	6,683	6,796	6,905	7,124	7,191	7,172	7,213	7,312	7,489
U.S. Crude Production											
Alaska	569	542	509	473	429	383	354	352	359	356	331
Other	1,863	1,853	1,851	1,882	1,853	1,764	1,771	1,766	1,738	1,738	1,651
Total	2,432	2,394	2,360	2,355	2,282	2,147	2,125	2,117	2,097	2,094	1,982
Petroleum Stocks (Year-End)											
U.S.(PAD I,II,V)	1,190	1,137	1,092	1,119	1,174	1,078	1,065	1,116	1,121	1,143	1,189
World	3,021	2,933	2,865	3,045	3,139	2,870	2,990	3,034	2,902	3,010	3,033
Pipeline Movements of Petroleum											
Gulf to Atlantic	784	797	835	838	867	854	855	877	857	900	927
Gulf to W. Coast	23	22	25	26	30	33	32	33	33	33	33

Sources: U.S. Army Corps of Engineers, Waterborne Commerce of the United States, detail files, for U.S. tank vessel trades; Clarkson Research Studies, for world trade; Lloyd's Maritime Intelligence Unit, Vessel Movements data files, for U.S. tanker calls; and Energy Information Agency, Petroleum Supply Annual, for other tank vessel market indicators.

Exhibit 10, cont.

Age Profiles for Year-End 2004 Tank Vessel Fleets

	<1980		1980-1984		1985-1989		1990-1994		1995-1999		>1999		Orders	
	No.	Mil. DWT	No.	Mil. DWT	No.	Mil. DWT	No.	Mil. DWT	No.	Mil. DWT	No.	Mil. DWT	No.	Mil. DWT
Tank Barge	69	0.6	49	0.6	12	0.1	10	0.l	19	0.3	44	0.7	20	0.3
Tankers	839	18.6	833	26.9	694	34.9	932	66.8	965	66.8	1,425	118.9	1,295	90.9
Foreign-Flag	816	16.8	807	25.5	691	34.4	931	66.8	951	66.4	1,420	118.1	1,291	90.2
Product	776	9.6	733	16.8	522	10.8	605	10.2	648	13.1	877	22.9	821	22.5
Crude	40	7.1	74	7.7	169	23.7	326	56.6	303	53.2	543	95.2	470	67.7
U.S-Flag	23	1.8	26	1.4	3	0.5	1	0.0	11	0.4	5	0.8	4	0.7
Product*	12	0.4	25	1.3	1	0.0	1	0.0	11	0.4	0	0	0	0
Crude	11	1.4	1	0.1	2	0.4	0	0	0	0	5	0.8	4	0.7

*Includes ITBs

Source: U.S. Army Corps of Engineers, Waterborne Commerce of the United States, detail files.

Exhibit 11